



**Proposal to Conduct  
a Study for the**

**California Secure Choice  
Retirement Savings Investment  
Board**

**STO RFI #13-01 – SB 1234**

**Proposal Submitted by [Cheiron](#)  
November 15, 2013**

## **2.0 TABLE OF CONTENTS**

<b><u>SECTION</u></b>	<b><u>Page</u></b>
<i>Transmittal Letter</i> .....	<i>i</i>
Section I.5. Information Requested.....	1
Section II. RFI Questions .....	9
• Plan Structure .....	9
• Investment Options.....	10
• Plan Design and Features.....	11
• Costs and Fees .....	12
• Administrative Issues.....	13
• Legal Issues.....	14
• Establishing a Retirement Investments Clearinghouse.....	14
• Developing the RFP for the Market Research, Plan Design and Feasibility Study...	14
• Strategies for Seeking and Securing Funding .....	15
• Timeline .....	15
 <b><u>APPENDIX</u></b>	
• Staff Résumés	

November 15, 2013

Mr. Grant Boyken  
California Secure Choice Retirement Savings Program  
915 Capital Mall, Room 110  
Sacramento, CA 95814  
Attn: Secure Choice RFI #13-01

**Re: Request for Information – RFI #13-01**

Dear Mr. Boyken:

In response to your Request for Information (RFI), Cheiron is submitting our proposal to conduct a study for the California Secure Choice Retirement Savings Board (“Board”).

We understand that the Board is seeking information from financial service providers, among others, including academic institutions, institutes of labor studies, and relevant research foundations, to help design the newly enacted California Secure Choice Retirement Savings Trust Act, which will provide a supplement to Social Security for private sector workers with no access to employer-sponsored retirement plans.

In the following sections we will introduce you to our qualified and experienced consultants as well as our effective and innovative style of consulting. As you read our response, we believe the following points will stand out about Cheiron:

**Extensive Experience:** Our consultants have years of experience addressing the unique needs of some of the largest public pension funds in the country, and Cheiron’s lead consultants have the highest level credentials.

Current and past accounts demonstrating our experience to provide the services you seek include the statewide retirement systems of California (CalPERS & CalSTRS), Maryland, Florida, Maine, Montana, Delaware, Pennsylvania (PMRS), Illinois, Kansas, Connecticut, Vermont, Washington State as well as Fairfax County and Arlington County, Virginia, and the city retirement systems of San Diego, San Francisco, Los Angeles, Philadelphia, Baltimore, San Jose, St. Louis, Annapolis, and the District of Columbia.

**Unique:** Cheiron’s success is based on creating imaginative, sophisticated and clearly understandable solutions to financial challenges that enable our clients to make the best policy, funding and design decisions. While other firms focus only on the present and the past, Cheiron presents projections under alternative economic scenarios and discuss financial system risks, allowing our clients to focus on the risk management elements of their retirement systems. Clearly the underlying theme in this legislation is the management of risk while providing retirement security to a large portion of the State’s workforce.

**Dynamic:** Our interactive modeling skills are perhaps the single greatest differentiator between our firm and others. These dynamic models permit “what-if” scenarios to be presented instantaneously at meetings, educating all interested parties of a pension plan’s funded status and contribution requirements. Thus, by the end of the meeting, you can make knowledgeable



decisions based on the likelihood of the desired result. Our model design capabilities rest in the imagination and innovation of all our senior consultants and have been used to demonstrate risk tradeoffs between defined benefit and defined contribution plans under alternative risk profiles and among different interested parties, in this case, employees, employers, and the State of California.

**Professional:** Compared to other similar firms, Cheiron has a higher percentage of fully credentialed actuaries on staff with public sector expertise as Fellows of the Society of Actuaries (FSA). Out of our total staff of 86 employees, 48 are credentialed, and of these, 30 have attained the FSA designation. Cheiron's actuaries are very active on professional committees as thought leaders and as resources to the profession and Cheiron, through interaction with actuaries across the country to exchange ideas. These activities include serving on the Board of Directors of the American Academy of Actuaries, the Conference of Consulting Actuaries, Actuarial Standards Board and chairing the Public Plan Subcommittee of the Academy.

**Focused:** Our focus is on our clients. For more than 25 years, our consultants have developed lasting relationships with our clients and gained their respect through high-quality work and value-added services. That client orientation has been rewarded by the steady growth of our client base.

We are confident we can do a superior job providing a unique experience for the Board, and we look forward to answering any questions you may have.

Sincerely,  
Cheiron



Kenneth A. Kent, FSA, FCA, MAAA, EA  
Principal Consulting Actuary

## **Information Requested (Section I.5)**

- **The name of the company, university, foundation or other organization and brief overview**

**Offeror:** Cheiron, Inc.

Cheiron ([www.cheiron.us](http://www.cheiron.us)) is an employee-owned corporation of financial consultants and actuaries advising a national client base of public employers, Taft-Hartley plans, non-profits and corporations, from offices in Washington, DC, Charlotte, NC, Chicago, IL, Los Angeles, CA, New York, NY, Philadelphia, PA, Portland, OR, San Diego, CA, and San Francisco, CA. Our engagements range from focused, one-time projects that supplement and augment the work of the current actuary or investment advisor, to serving as the plan or plan sponsor's primary consultant.

Cheiron was incorporated in the State of Delaware in September 2002 and began business in November 2002. Cheiron was formed after the seven founding consultants left a major actuarial firm in Washington, DC due to a philosophical disagreement with respect to imposing liability limitations on clients. We took exception to the efforts of our industry to impose liability limitations on clients. Cheiron has never asked for liability limitations and never will.

Cheiron's staff includes 86 employees, 48 of whom are credentialed actuaries, including 30 who are Fellows of the Society of Actuaries (FSA), the highest level of professional accreditation that an actuary can achieve, 17 who are Associates of the Society of Actuaries (ASA), 45 who are Members of the American Academy of Actuaries (MAAA), and 38 who are Enrolled Actuaries under ERISA (EA). All of these employees are involved in providing actuarial and benefit consulting services.

Our primary business focus is in the pension and health arenas, where we utilize our technical expertise to identify, measure, and monitor financial risks. We then help our clients understand how to most effectively deal with those risks. Our clients include several very large complex pension and health and welfare systems.

- **The name of the individual(s) submitting the response**

Kenneth A. Kent

- **The title(s) or position(s) of the individual(s)**

The following individuals represent Cheiron's Senior Consulting Team whose services and expertise are available to the Board.

- **Kenneth A. Kent, FSA, FCA, MAAA, EA**, Principal Consulting Actuary, has over 35 years of actuarial consulting experience. His expertise in managing the complex

financial, regulatory, legal and administrative issues surrounding pension and defined contribution plan design and funding strategies has helped scores of public sector and corporate plan sponsor clients, as well as multiemployer and single employer plans since 1976. As a past Vice President of Pensions for the American Academy of Actuaries, Ken has testified before Congress on issues of pension funding and reform. He is also past chair of the Public Plan Subcommittee of the American Academy of Actuaries and is currently on their Board of Directors. Ken is currently the lead actuary for the Philadelphia Employees Retirement System, the Employees Retirement System for the City of Baltimore, and the Pennsylvania Municipal Retirement System. He is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.

- **Bill Hallmark, ASA, FCA, MAAA, EA**, Consulting Actuary, has over 27 years of actuarial experience and specializes in the financial management of retirement programs, defined benefit, defined contribution and retiree medical plan design, financial accounting requirements, funding requirements, and retirement valuations. He has written articles on retirement plan design and investment risk in public pension systems for the Society of Actuaries. His experience includes the state retirement systems in Oregon, Arizona, Washington, Utah and the California State Teachers Retirement System. He currently serves as chair of the Public Plan Subcommittee of the American Academy of Actuaries, and in that capacity recently submitted comments to GASB on their exposure drafts for pension accounting and financial reporting on behalf of the Academy. He also serves on GASB's advisory committee for the implementation guides for Statements 67 and 68. He is an Associate of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.
- **Graham A. Schmidt, ASA, FCA, MAAA**, Consulting Actuary, has over 14 years of extensive experience with actuarial valuations and related studies for large, complex systems. He is recognized as a leader in actuarial issues related to California public pension plans, and currently serves on the State's Actuarial Advisory Panel. He is an Associate of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries.
- **Gene Kalwarski, FSA, FCA, MAAA, EA**, Principal Consulting Actuary, has over 35 years of experience and is a national specialist in public sector funding of retirement programs. Gene is the President and Chief Executive Officer of Cheiron and one of its founders. He is the developer of Cheiron's consulting tools and consulting methodologies. Gene has been the lead actuarial consultant to the retirement systems of Maine, Maryland, Delaware, Florida, Kansas, as well as retirement systems for the cities of San Francisco, San Diego, San Jose, Kansas City and the District of Columbia. He has also assisted on special projects for the states of Connecticut, Illinois, Vermont, Massachusetts, Oregon, California, Idaho, and Washington. He has testified on several occasions before U.S. Senate Committees and regularly addresses state legislatures and boards of trustees on behalf of the numerous statewide pension funds he has represented. He is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting

Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.

- **Richard Hudson, FSA, FCA, MAAA, EA**, Principal Consulting Actuary, has over 20 years of actuarial experience working with a variety of pension plans. He is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA. He has assisted public and private sector clients in areas of plan design, asset/liability modeling, labor negotiations, projection modeling, and experience studies. Richard is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.
- **Robert McCrory, FSA, CERA, FCA, MAAA, EA**, Principal Consulting Actuary, has over three decades of experience with stochastic modeling of public retirement plans, asset/liability modeling, actuarial valuation software design and implementation, and risk appraisal software. He currently serves as lead actuary to several clients including the California Public Employees' Retirement System and several transit districts. Robert is a Fellow of the Society of Actuaries, a Chartered Enterprise Risk Analyst, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.
- **Stephen T. McElhaney, FSA, FCA, MAAA, EA**, Principal Consulting Actuary, is a nationally respected public sector retirement consultant with over 30 years of extensive experience providing actuarial services for major public employer retirement systems. His experience includes the state retirement systems in Montana, Oklahoma, and Minnesota and the municipal retirement systems in St. Louis, MO, Hampton, Alexandria, Newport News, and Hampton, VA. His actuarial auditing experience includes the state retirement systems in Virginia, Illinois, Ohio, Kansas and Colorado, the MoDOT & Patrol Employees Retirement System, and the municipal retirement system in Richmond, VA. Steve has consulted to state legislatures in Ohio, Virginia, Maryland and Kansas. Steve is currently on the Board of Directors of the Conference of Consulting Actuaries and is a member of the Steering Committee of the Conference's Public Plans Committee. Steve is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA.
- **Fiona Liston, FSA, MAAA, EA**, Principal Consulting Actuary, one of Cheiron's founders and has over 30 years of actuarial consulting experience. Over the last 18 years she has worked almost exclusively in the public sector. She has been instrumental in producing and presenting the annual valuation results for the public pension plans of Maine and Delaware as well as other local jurisdictions such as the county of Fairfax, VA, and the cities of Annapolis, Alexandria, Norfolk, and the District of Columbia. She is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA. Fiona is a member of the Pension plan Sub-committee of the Actuarial Standards Board, which the actuarial body that promulgates the professional standards of our profession.

Complete résumés for these individuals can be found in the Appendix.

- **Indication of willingness to participate in a follow-up call or interview if necessary to clarify answers**

Cheiron is available and interested in participating in any follow-up calls or interviews to clarify answers and to present our capabilities in helping the Board.

- **Contact information including a telephone number and email address**

The primary contact for this engagement is:

Kenneth A. Kent, Principal Consulting Actuary  
703-893-1456, ext. 1003 / [kkent@cheiron.us](mailto:kkent@cheiron.us)

Secondary contact can be made with:

Graham Schmidt, Consulting Actuary  
703-893-1456, ext.1137 / [gschmidt@cheiron.us](mailto:gschmidt@cheiron.us)

- **Detailed responses to the questions found in Section II of this document [Respondents are not necessarily required to answer all questions. Answer only questions relevant to your expertise and experience.]**

Agreed

**Respondents are invited to include additional information they feel would benefit the Board in its development of the Request for Proposal (RFP) for the Secure Choice market analysis and feasibility study and for the design and implementation of the Program.**

### **What Sets Us Apart**

Cheiron's rapid growth and growing national reputation is founded on the ability of its consultants, using projection modeling technology as a valued tool, in educating and illustrating to our clients the implications and risks of their retirement systems. We have created various ways to illustrate financial implications of retirement systems to provide a deeper understanding among Board members who don't deal with the terms we use every day.

Through assigning technical projection models specifically as tools to communicate financial risks of pension funds to clients, Cheiron has developed a national reputation among public sector and multiemployer clients. Our rapid growth and innovative access to electronic file-sharing capability provide the flexibility to use our staff from any location efficiently.

Our innovative communication techniques use interactive models that incorporate sensitivity analysis in forecast results. We do this for two reasons. First, our clients better understand the

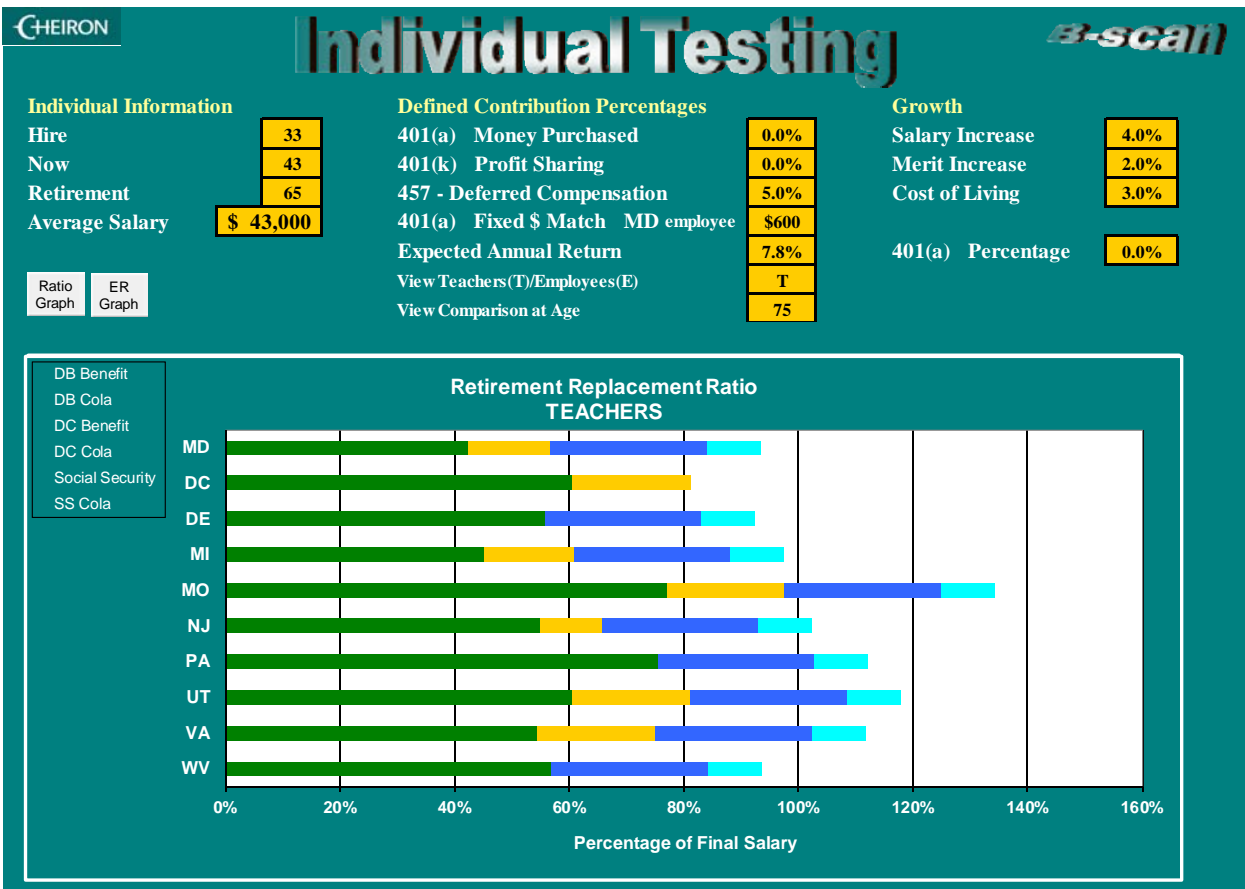
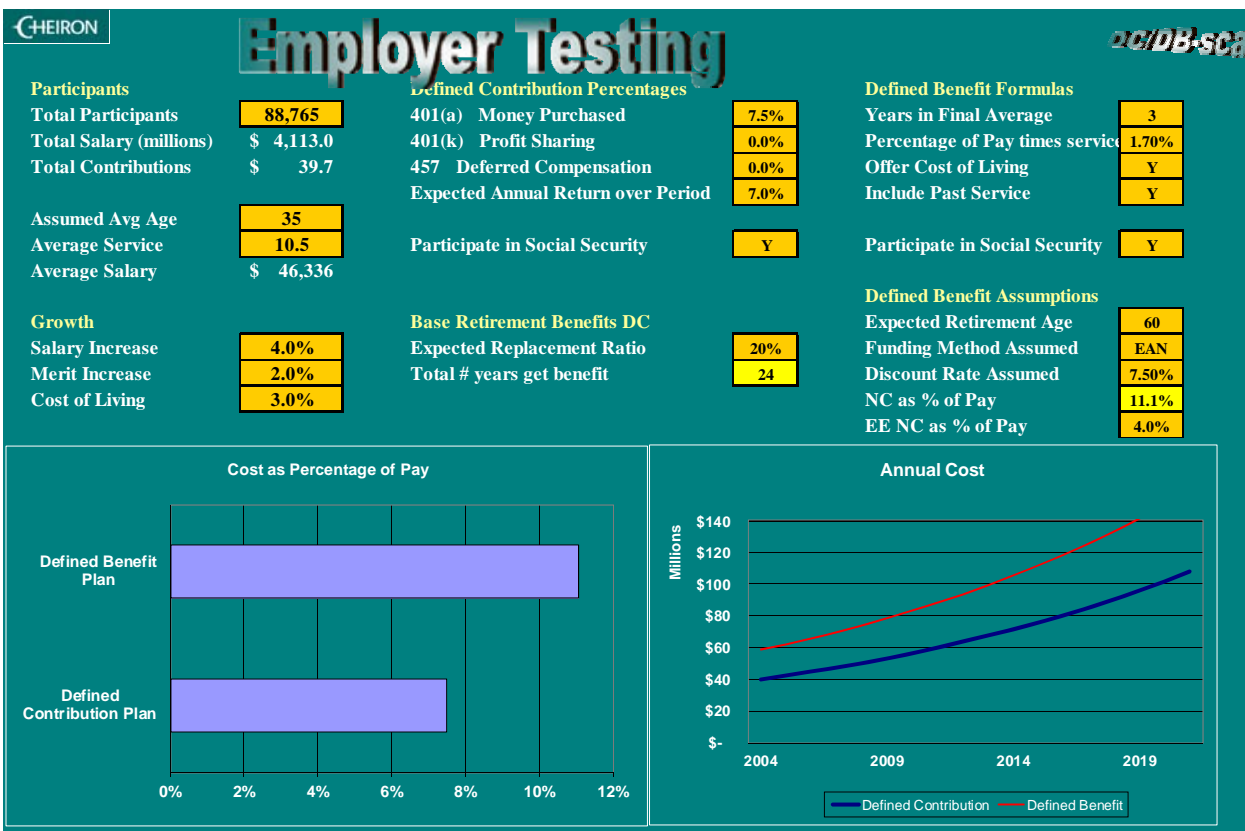


financial position of their plans, allowing them to make better, more informed decisions. Second, it is an excellent quality control feature.

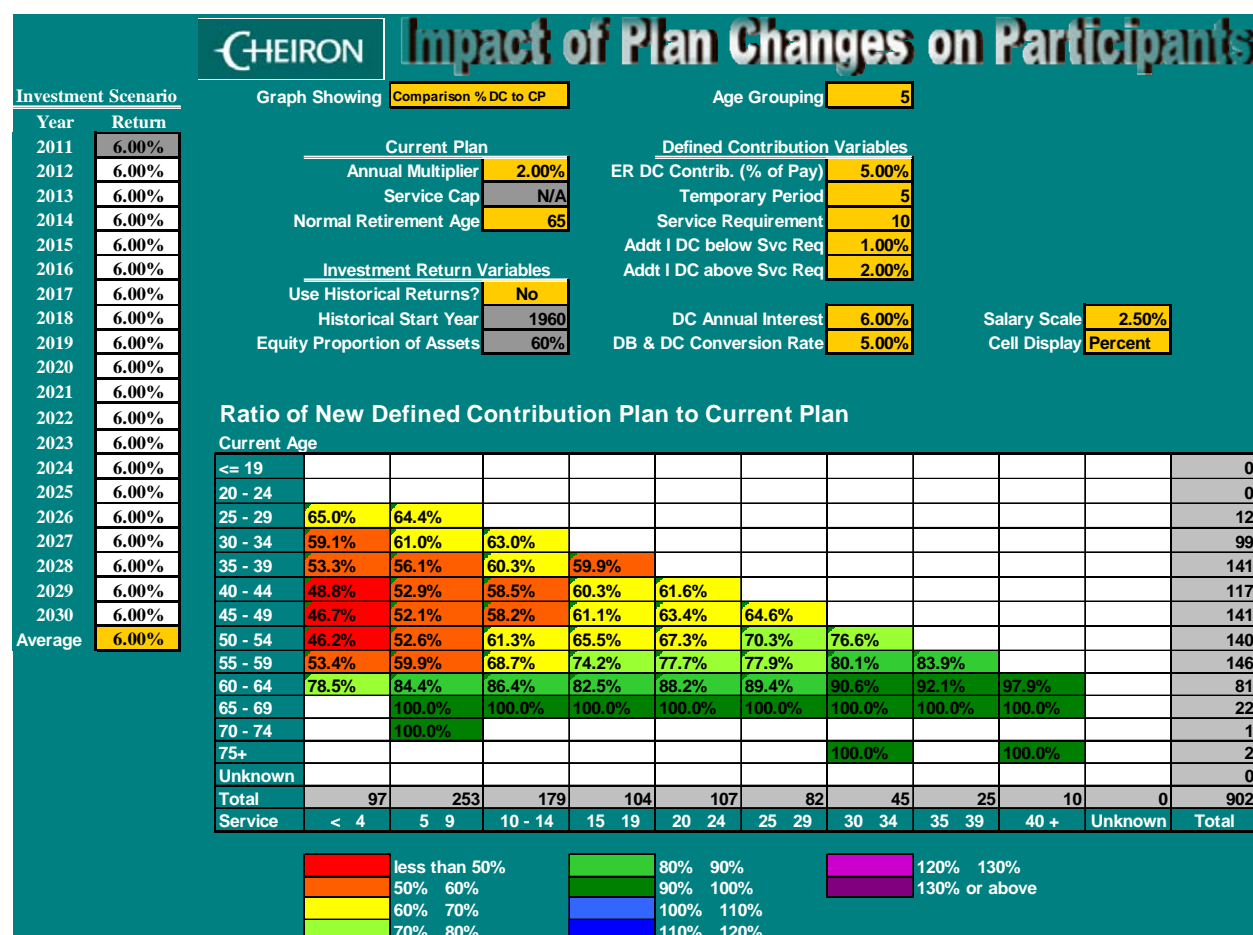
Cheiron offers a range of actuarial consulting services, from supplemental services that augment the work of a system's in-house actuary to a comprehensive suite of services which we would provide in the role as your actuary and advisor. **At the heart of our success and rapid growth is our approach of using interactive modeling to enhance our communication for all of our work.** Our modeling tools, complemented by our consulting style and communications expertise, have been providing our clients with a better understanding of the challenges and risks of retirement systems for far longer than the age of Cheiron. This approach was developed over 20 years ago by the experienced consulting team that is the foundation of this company and is the basis for the trust developed by our consultants with our clients and the other professionals who serve them. The highlight of these services is **our proprietary *P-scan* product for pension funds and *H-scan* for health funds.** Our products combine solid actuarial analysis with innovative applications of technology to enable Cheiron's consultants and their clients to instantly and interactively explore scenarios in ways that previously took weeks to work out.

Through these approaches, we have significant experience in developing unique tools to meet the needs of particular projects similar to what your Board is facing. For example, the following screen shots are tools using benefit designs between traditional defined benefit plans to defined contribution plans and numerous hybrid arrangements that can fall between the two.

While these screens contain a lot of information, we can vary all the inputs and custom design alternatives that would help illustrate retirement income achieved and the risk levels for different stakeholders under alternative plan funding and design structures.



This next table is an example of a model developed to demonstrate how participants do better or worse under alternative benefit structures. This type of approach can be used to illustrate what benefit structure best meets the objectives set out by the Program.



While our modeling and risk analysis tools are at the heart of our consulting work with our clients, we do not overlook the more traditional forms of reporting and we generally prepare valuation reports and withdrawal liability valuation reports for our clients.

## Quality Control

On all large accounts we always assign more than one consultant, providing a second set of review at the senior level on all the work performed. Below we describe our quality control operating procedures.

- **Visionary Responsibility:** Chief or lead actuaries are responsible to make sure from the highest level that proper procedures and techniques are being incorporated and that our consulting is visionary and leading edge.

- **Contingency Planning**
  - 1) Assign an account team with a co-lead consulting structure.
  - 2) If a client is about to go into a period where the Board is meeting or negotiations are taking place, personnel are lined up to work the hours needed to not only answer questions but to peer review and check numbers.
  - 3) Maintain an internal Client Services Director to ensure availability of consultants on a rush basis.
- **A top down consultant approach**  
At Cheiron, our consultants get their “hands dirty” in performing detailed computations. They do not solely rely on lower level technicians in back rooms to perform all the calculations, because the back room approach is fraught with risk and in fact is no longer necessary given today’s technological advancements.
- **Open lines of communication**  
Cheiron’s consultants remain in contact with their clients throughout the consulting process, by validating data, checking assumptions, and verifying the reasonableness of preliminary results.
- **Clear communication of inherent uncertainties**  
Where appropriate, Cheiron consultants present calculations and forecasts in terms of the likelihood of results, along with multiple numbers under various assumptions.
- **Certification of client work products**  
The prescribed consulting services can run the gamut from “back-of-the-envelope” cost estimates – where either due to time or budget a fully certified work product is not necessary – to a fully certified actuarial report. Our consultants are adept at identifying the type of work product that fits the client’s needs and budget.
- **Interactive modeling with built in sensitivity and forecasting**  
Cheiron essentially completes all actuarial or benefit design assignments using interactive models that do both sensitivity analysis and forecasting. This not only helps educate our clients, but it also provides an added check for us as consultants.

These quality control procedures are not just Cheiron’s company policy. These methods are the way our founding partners have always worked and new hires are trained to employ because we believe that it is the right way to do business. We believe that the best way to consistently produce high-quality work is to build into their routines ways to identify and catch errors as they are being made. This philosophy confirms their individual work ethic. Over the last 20 years there has not been a single claim for a mistake made by one of our consultants. We believe this was due to more than good luck.

## RFI Questions (Section II)

- *Plan Structure*

1. **What type of plan structure would you recommend to best meet the statutory goals and objectives for the Program, which include simplicity, ease of administration for employers, preservation of principal and portability of benefits (e.g., a pooled fund with guaranteed interest credited to individual accounts on a regular basis that utilizes a gain and loss reserve? Individually held IRA-type accounts with a variety of funds from which participants could choose? Something else altogether?)**

Our approach to this question would be more a process than a direct answer. The Program objectives set out a number of hurdles to achieve, all of which may not be obtainable and could require compromise. If the objective is to provide retirement security, defined contribution plans have failed to do so consistently for those who need it most and may not alleviate the strain on California's safety net programs. If the objective is to have no additional obligation for the state or any other party, traditional defined benefit plans have failed to keep the costs to the originally anticipated levels, leaving sponsors and/or the Pension Benefit Guaranty Corporation to provide unanticipated support.

Possible approaches to develop a program that provides secure lifetime income benefits for a predictable and efficient price include variations combining the concepts of variable annuities with potential guarantees based on insurance-like assumptions. Variable annuities provide a mechanism to adjust each individual's benefit amount to reflect changing costs or investment returns without creating a liability for the State of California or employers while still providing a guarantee of a lifetime income. However, the variability of the benefit amount may not meet the objectives of preserving the safety of principal and providing a stable and low-risk rate of return. Consequently, mechanisms can be explored to provide some guarantees to meet these objectives by adjusting the investment structures, providing floors, and using caps or reserves to fund the potential guarantees. To ensure that neither employers nor the State would incur a liability, some level of sharing of the risk of providing these guarantees between participants may be required.

A special type of IRA could be considered which allows for very conservative accumulation and mandatory annuitization at retirement that might achieve these objectives. But, this strategy exposes the individual to interest rate risk as well as investment risk, and may result in the loss of risk pooling of longevity risk.

So, the process would be to define the objectives, considering them one at a time, to determine the best alternative and then prioritizing them. Then, explore a process of compromising those objectives that are low on the prioritization to determine how you would get closest to meeting the most important goals. In this way, we would anticipate the Board can determine if achieving the legislative goal is feasible.

Our job would be to use our resources and experience to facilitate the process and model the risk of not achieving the objectives for each alternative.

- ***Investment Options***

2. **What investments would you recommend to best meet the goals and objectives of the Program, both in terms of the types of funds and underlying assets, and the style of management (i.e., active vs. passive)?**

Cheiron does not provide investment consulting.

3. **If you recommend more than one investment option, what would you recommend as the “default,” or automatic, option that would be chosen for participants who do not make an affirmative decision?**

Decline to respond – not our expertise.

4. **Would you recommend including any insured interest or insured income products? Why or why not? What are the advantages and disadvantages of these products in terms of performance, risks, cost and transparency?**

Insured income products may be appropriate if it is determined the risk or risk-pool levels do not support a self-insured arrangement. The primary opportunity for such a large system, however, is to create a self-adjusting self-insured system.

5. **Would you recommend the Program provide a lifelong stream of guaranteed income? If so, how would you convert retirement savings into a lifelong retirement income stream, and what investment product would you recommend to accomplish this objective?**

Yes. Anything other than a lifelong stream of income will fail to meet the objectives of the program and could result in passing on unnecessary risks to California’s safety net programs.

The only investment products we are aware of that accomplish this objective are annuity products offered by insurance companies. However, with these products, the State may be viewed as backstopping the risk of nonpayment by the insurance company. We believe there is an opportunity to pool the longevity risk within the program so long as there is an ability to adjust the amount of lifetime income provided within certain parameters.

6. **Would your recommendations require changes to the investment policy parameters in SB 1234? If so, what modifications to the statute would you recommended, and why?**

Decline to respond – not our expertise.

**7. What recommendations would you make to ensure an effective risk management system is in place to monitor risk levels of the Program and ensure risks taken are prudent and properly managed?**

While this is still an investment policy question, we have seen when risks have been taken without clear discrimination or determination of risk tolerance and whose risks are being taken. The traditional asset allocation and diversification strategies to maximize return are not well measured against risk tolerances. And risk tolerances often go undefined.

In Cheiron's approach to asset liability modeling, our first step is an engagement to determine the conditions of failure in the eyes of those responsible for oversight--determine how these failure conditions can be met. The failure conditions are then ranked in accordance of importance, and asset allocations are statistically measured against these conditions and weighted according to importance to determine the most appropriate risk management structure for elements on the investment side. We would suggest a similar process for other areas of the Program structure.

- ***Plan Design and Features***

**8. What would you recommend as the automatic, or “default,” contribution level for participants who do not opt out, but who do not make an affirmative decision to contribute at a higher rate than the default rate?**

The appropriate default contribution level varies as a function of age, pay level, and retirement objective. In any event, a program should phase into the contribution levels over time to allow for potential pay increase to cover some of the increase in pay deductions.

The ultimate default will depend on what financial retirement impact is intended for the Program. Picking a default before defining specific targeted objectives at some retirement date is potentially backward. Knowing what you want to achieve and then determining if it is feasible within a reasonable default contribution would be a better approach.

**9. What options, if any, would you recommend for an automatic escalation feature that increases participants' contributions over time?**

This is an essential consideration as discussed above. The amount of the escalation is a balance between the timeframe until the level of default contribution is reached and the affordability of the escalation.

**10. Are there any other plan design features that should be included (or eliminated) to ensure the plan meets the goals and objectives of the Program? Please explain.**

The current focus is on IRAs and similar vehicles to avoid the program from becoming an ERISA plan. However, if the ultimate plan permits lump sum distributions, the plan may not achieve its goal of alleviating the strain on California's safety net programs. Mandating and providing affordable annuitization of savings to provide the financial and longevity efficiencies that qualified defined benefit plans produce is essential for the plan to meet the goals and objectives of the Program.

**11. What plan design elements would you recommend to minimize pre-retirement "leakage"?**

The simplest way to prevent pre-retirement leakage is to prohibit it or tax it heavily. However, 401(k) plans found that locking up the assets made people less willing to contribute. There has to be a balance to attract participation, but only allow access to the funds prior to retirement in very limited circumstances. Leakage can be controlled through prohibitions, penalties or incentives. A combination of all three should be considered.

Some form of hardship withdrawal is reasonable, but plan assets should generally be protected from creditors. Perhaps prohibitions or significant penalties could apply for low levels of contribution (e.g., up to the default level). Additional withdrawal flexibility could be granted, for example, only for contributions in excess of the default level. Alternatively, restrictions could be based on the balance in the account for a given age. These restrictions would limit withdrawals both through the penalties and through the signals they would send about the minimum contribution rate and the minimum balance that should be accumulated by certain ages.

Alternative designs could be considered along the lines of what used to be a popular insurance based product called individual level premiums. Each year's contributions would be effectively invested in annuity contracts with the participants entitled to the retirement income from the sum of a lifetime of annual annuity purchase amounts.

This concept is not too different from the Adjustable Pension Plan Cheiron has developed with the UFCW, which uses a floor defined benefit plan and unit-based credits that get marked to market and is predicated on an ultraconservative investment policy to allow some upside potential additional benefits. However, this approach is an ERISA plan.

- ***Costs and Fees***

**12. Provide an estimate of the ongoing administrative costs and fees of the investment options you recommend and identify the components of those costs and fees.**

Decline to respond – not our expertise.

**13. How would you propose to assess fees to cover the costs required to start up the plan? Please identify the components of those costs and fees.**



The ultimate program will still have fees. The anticipated funding source to cover the expenses of the plan would largely be some basis point charge to the assets. It would seem reasonable to expect that the initial start-up costs will likely have to be financed by the State with repayment over time from the assets of the plan.

**14. How would you recommend the Board ensure transparency of fee and expense information available to the Board and Secure Choice participants including transparency of service providers' relationships or potential conflicts that may increase costs and/or conflict with the interests of plan participants?**

Our recommendation would be to have an independent auditor tasked with the production of a report specifically designed to summarize the source of all fees and recipients of any income derived from services rendered to the Program. There are accounting standards and federal models for the private sector (5500 Schedule C filings) that can be used to develop this type of communication that can be made available in electronic form and accessible through the internet.

- *Administrative Issues*

**15. What are your recommendations for identifying, and disseminating information to, eligible employers and employees (including employees of nonparticipating employers)? Consider the potential roles that could be played by California's Employment Development Department, any other state agencies or departments, and/or private sector vendors.**

This issue needs to be addressed with the complete integration of information technology – to that extent we are not experts in this area and decline responding.

**16. What are your recommendations for managing enrollment, the receipt and recordkeeping of employee payroll contributions and transactions, and managing rollovers in and out of Program accounts, including potential roles for the Employment Development Department, any other state agencies or departments, and/or private sector vendors?**

This issue needs to be addressed with the complete integration of information technology – to that extent we are not experts in this area and decline responding.

**17. Do you have any particular concerns about, or anticipate any significant challenges with, administering the Program? If so, how would those concerns and challenges best be addressed?**

This issue needs to be addressed with the complete integration of information technology – to that extent we are not experts in this area and decline responding.

- *Legal Issues*

**18. What approach would you recommend to demonstrate the Program is not subject to ERISA and that Secure Choice accounts would qualify for favorable federal income tax treatment generally granted IRAs?**

Decline to respond – not our expertise.

**19. What further statutes and/or regulations would you recommend be enacted in order to strengthen the legal basis for this retirement savings program?**

Decline to respond – not our expertise.

- *Establishing a Retirement Investments Clearinghouse*

**SB 1234 grants the Board the authority to establish an online clearinghouse, and to register for inclusion on the website vendors who offer employer-sponsored retirement plans and payroll deduction plans and who meet specified requirements. The cost of establishing the registration process and the online clearinghouse would be borne equally by registered vendors.**

**20. Please provide your assessment as to whether there would, or would not, be sufficient interest from vendors to establish an online Retirement Investments Clearinghouse.**

Decline to respond – not our expertise.

**21. How would you recommend the Board establish a process to register participants and operate the clearinghouse effectively, efficiently, and in a manner that eliminates or reduces any liability on the part of the Board associated with registering participants and operating the clearinghouse?**

Decline to respond – not our expertise.

- *Developing the RFP for the Market Research, Plan Design and Feasibility Study*

**22. Do you have any recommendations for the type of firm, or firms, that would be most qualified and able to conduct the work necessary for the market research, feasibility and plan design study?**

Decline to respond – not our expertise.

**23. Are there firms that would be able to successfully conduct all aspects of the work, or is it likely the Board will have to contract with more than one firm?**

We suspect the Board will have to contract with more than one firm.

**24. Do you have recommendations about requirements that should be included in the RFP either in terms of the scope of work required or the qualifications of bidders?**

Decline to respond – not our expertise.

- ***Strategies for Seeking and Securing Funding for the Market Research, Plan Design and Feasibility Study***

By statute, funding to complete the market and feasibility study can only be obtained from the contributions of private individuals, private nonprofit or for-profit entities, from federal sources or from any combination of such sources. The use of State funds or borrowing funds for the study is prohibited.

**25. Do you have suggestions and/or examples for the types of organizations that might be able and willing to donate significant funding, or sources of federal funds that might be available for the study?**

Decline to respond – not our expertise.

**26. Given that some organizations do not or cannot donate directly to governments, will the fact that donated funds must be placed in a State of California account make it more difficult to raise money? If so, can you suggest funding solutions or arrangements that might help to avoid this difficulty while maintaining the state's independent oversight and jurisdiction over the study?**

Decline to respond – not our expertise.

- ***Timeline for the Market Research, Plan Design and Feasibility Study***

Below is a time line Secure Choice staff presented to the Board at their first meeting. The Board directed staff to revise the timeline and aim to implement the program and begin enrolling participants in 2015.

**27. Do you have recommendations for revising the timeline in a manner that would allow for an earlier implementation date?**

Activities	Dates
Release the RFI and receive responses from experts and scholars	Sept. 2013 – Nov. 2013
Prepare RFP for the market and feasibility study	Sept. 2013 – Jan. 2014

<b>Release RFP and choose vendor(s) to conduct the study</b>	<b>Jan. 2014 – April 2014</b>
<b>Vendor(s) conduct market and feasibility study</b>	<b>April 2014 – Oct. 2014</b>
<b>Board considers study recommendations and transmits final report with recommendations to the Legislature, including a request for the authority to make the Program operational if the study's findings are favorable</b>	<b>Oct. 2014 – Jan. 2015</b>
<b>If the Board recommends making the Program operational, and in anticipation of receiving Legislative authority to do so, develop RFPs for administrator, record keeper, investment consultant and other contracts necessary to operate the program.</b>	<b>Jan. 2015 – July 2015</b>
<b>Enactment (or failure) of an authorizing statute expressing the approval of the Legislature to fully implement the Program</b>	<b>July 2015</b>
<b>If authorizing statute is enacted, begin the bidding process for vendors and consultants necessary to administer the Program</b>	<b>July 2015 – Oct. 2015</b>
<b>Secure Choice begins enrolling participants</b>	<b>Early 2016</b>

We don't see a problem with the time line, however a number of the processes are outside our areas of expertise and should be considered by specific service providers and legislative experts.

*Appendix*  
*Staff Résumés*

**Kenneth A. Kent**  
**FSA, FCA, EA, MAAA**

Kenneth A. Kent, a Consulting Actuary for Cheiron, has over three decades of professional, managerial and public service experience working on challenging retirement plan assignments and public policy issues. His expertise in managing the complex financial, regulatory, legal and administrative issues surrounding pension and defined contribution plan design and funding strategies has helped scores of multiemployer, public sector and corporate plan sponsor clients since 1976.

Ken has more recently led the profession in addressing the ever changing landscape for pension reform. Working with actuaries throughout the country, Ken has orchestrated the development of a unified voice from the profession to guide Congress on issues of single and multiemployer issues to reform the funding rules and expand relief to employers and employees. Ken's wide-ranging expertise on pension matters led to his being called to testify before Congress on pension reform legislative proposals. He has met regularly with IRS officials to help work out interpretations and processes in an effort to expand the flexibility of Plan Sponsors in retaining their programs.

Some of his recent consulting assignments include:

- Developing a comprehensive retirement policy to benchmark and measure changing business needs against financial resources. This project included interviews with all stakeholders of a large public employer plan to develop a series of rules for the legislative body to refer to in addressing demands for benefit and cost change. The process included going back to identify the fundamental value for the system and the public in sponsoring a defined benefit plan and how it could help manage the various labor resources. The rules have been effectively employed in the decision process.
- Creating a standard Government Accounting Report format for meeting the emerging required disclosure of post-employment benefits. As standards of reporting change, they call for creative solutions in communicating the implications so public officials can understand the implication of the rules and emerging financial obligations of the public entity. This project was engaged when GASB was still issuing draft statements for what is now GASB 45.
- Designing a supplemental Executive Retirement Plan to reflect a phantom bonus arrangement within a targeted income replacement program. Financial incentives are a critical component of retention for highly effective management teams. This is just as true for smaller organizations as for Fortune 500 companies. In this case, while the client was a public company, they wanted to avoid the concerns over dilution of shares when issuing performance incentives tied to company performance. A special design was applied to meet these unique sets of goals to meet the company's needs.

- Evaluating cost protocols for Deferred Retirement Option Plans (DROPs). In the public sector arena, DROP plans have grown in popularity, often because they have been perceived as cost neutral benefits. However, they have a cost which is a function of the behavioral change on retirement date selection by plan participants. For one of Ken's large public employers, the plan design required a cost neutral basis to continue after a sunset provision, to ensure limited financial obligation to the employer. Working with the Pension Board, labor representatives and City administration a compromise was developed that held up through the sunset provision.

Ken's experience includes work for the Cities of Philadelphia, Pennsylvania, Miami, Florida, Wilmington, Delaware, the states of Utah, Pennsylvania, and Alaska, the Washington Metropolitan Area Transit Authority, over 20 Police and Fire Fighter funds throughout West Virginia, and many large multiemployer plans throughout the east and southeast.

Ken has been a principal at several of the nation's largest actuarial consulting firms, including prior to joining Cheiron, Mercer Human Resource Consulting, Inc., simultaneously managing large client teams in several major U.S. cities. His civic activities include having served as Vice President of Pensions for the American Academy of Actuaries, President of the Conference of Consulting Actuaries, and Chair of the Joint Committee on the Code of Professional Conduct. He authored a recent white paper titled *Disclosure Under the Code of Professional Conduct -- Concepts on Professionalism*.

**William R. Hallmark**  
**ASA, FCA, EA, MAAA**

Bill Hallmark, a nationally respected public sector retirement consultant, joined Cheiron in September, 2009, opening Cheiron's office in Portland, Oregon. Bill has over 27 years of actuarial experience providing consulting services for all types of retirement programs. He specializes in the financial management of retirement programs; defined benefit, defined contribution and retiree medical plan design; and the accounting and financial reporting requirements for public pension plans.

Bill is chair of the Public Plans Subcommittee of the American Academy of Actuaries and serves on the Academy's Pension Practice Council and Pension Committee. He is a frequent speaker at actuarial conferences and currently also serves on the Government Accounting Standards Board's advisory committee for the implementation of GASB 67 and 68. In addition, Bill actively works with the Public Pension Committee of the Conference of Consulting Actuaries.

Prior to joining Cheiron, Bill was a Principal for Mercer where he led its west unit center of expertise for public sector retirement system consulting located in Portland and was the lead actuary for the Oregon Public Employees Retirement System. In this role, Bill also led Mercer's efforts in the west to help employers comply with GASB Statement Nos. 43 and 45 requiring financial disclosure of Other Post Employment Benefits.

His experience includes the state retirement systems in Oregon, Washington, Utah, Arizona and CalSTRS as well as the California retirement systems in San Francisco, San Diego, San Jose, the County of Santa Barbara, and the County of Fresno.

Bill also developed intellectual capital for Mercer's consulting to public sector clients, including a framework for analyzing funding strategies for previously unfunded OPEB obligations, hybrid retirement system designs, and managing risk in public sector retirement systems. He co-authored a paper for the Society of Actuaries Retirement 20/20 Conference entitled "New Retirement Designs for the 21<sup>st</sup> Century," and a paper for the Society of Actuaries Public Pension Finance Symposium entitled "How Much Investment Risk Can a Government Sponsored Pension Plan Afford?"

Bill is an Associate of the Society of Actuaries, an Enrolled Actuary under the Employee Retirement Income Security Act of 1974 (ERISA), a Fellow of the Conference of Consulting Actuaries and a member of the American Academy of Actuaries.



**Graham A. Schmidt**  
**ASA, FCA, MAAA**

Graham Schmidt, Consulting Actuary, is an Associate of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries. He has over 14 years of actuarial experience and joined Cheiron as a result of EFI Actuaries becoming an operating division of Cheiron.

Graham currently serves as the consulting actuary to a number of public sector plans, including “Act ‘37” county retirement systems (such as the Counties of Marin, Merced and Stanislaus), transit districts (such as Sacramento Regional Transit and the Valley Transit Authority), and public agencies (such as the San Francisco Bay Pilots and the San Juan Water District).

Graham’s specialized areas of expertise include actuarial audits, accounting/disclosure issues and OPEB analysis. He headed EFI’s practice in retiree medical benefit trusts – leading in the development of over a dozen tax-advantaged union-run trusts that provide pooled lifetime benefits under a fixed contribution.

In 2011, Mr. Schmidt was named as the SACRS representative to the California Actuarial Advisory Panel. Graham is a member of the Academy of Actuaries Public Plans Subcommittee and the Conference of Consulting Actuaries Public Plans Committee, the primary actuarial committees dealing with public sector retirement issues in the US. Graham also serves on the Society’s Retirement Plans Experience Committee (RPEC), the Committee responsible for developing the mortality tables used by all US pension actuaries.

Among Mr. Schmidt’s recent presentations are the following:

- Conference of Consulting Actuaries – The State of Mortality
- SACRS (Fall Conference) – STABLE Funding
- SACRS (UC Berkeley) – Active and Passive Management, Building an Investment Portfolio
- CALAPRS – GASB Accounting Statements, Pension Funding, Understanding Actuarial Valuations

Graham received a B.A. in Mathematics and B.S. in Mathematical Science with Departmental Honors from the Johns Hopkins University.

**Gene M. Kalwarski**  
**FSA, FCA, MAAA, EA**

For over three decades, Gene Kalwarski has been one of the nation's leading advisors to multi-billion dollar public sector and jointly-trusted pension funds. He has served as plan actuary to many such funds and is often retained as a specialist to help them address complex financial issues. He is an industry leader in the development of PC-based financial applications and interactive analytical tools that empower fund trustees to understand, evaluate, and strategize alternative solutions to their financial challenges. Gene's ideas and achievements have been chronicled in many industry publications, *Money* magazine, and at the annual *Business Week* CFO Forum.

Gene is noted for his ability to develop and present creative and complex actuarial strategies understandably to audiences with limited technical expertise. He has testified on several occasions before U.S. Senate Committees, and regularly addresses state legislatures and boards of trustees on behalf of the numerous state-wide pension funds he has represented.

Gene's experience with trusted pension funds includes:

- Serving as ongoing actuary to the San Diego City Employees Retirement System, the San Francisco City and County Employees' Retirement System, the San Jose Federated City Employees' Retirement System, the San Jose Police and Fire Department Retirement Plan, the Retirement Division of the City of Kansas City, MO, the retirement systems of Maine, Maryland, Delaware, Florida, Kansas, Connecticut, and West Virginia. In addition, he was actuary to the Vermont Municipal Employees' Retirement System and the retirement systems of the District of Columbia, Fairfax County, Virginia and Arlington County, Virginia.
- On special projects Gene has been retained by several other state-wide retirement systems in Iowa (IPERS), Massachusetts (SERS), New York State, Illinois, Rhode Island, Oregon, and California (CalPERS, and CalSTRS), as well as the City of Los Angeles.
- Over the years, he has also been called on by several financially challenged Taft-Hartley funds to offer advice and analysis. Such pension funds include United Food and Commercial Workers (UFCW) funds in Atlanta, Baltimore/Washington, Philadelphia, Seattle, and Southern California, several of the largest International Brotherhood of Teamsters (IBT) funds, Hotel Employees Restaurant Employee (HEREIU) pension funds nationwide, and the United Mine Workers (UMWA) Pension Fund.

In addition, Gene has been involved in several high-stakes and complex assignments including:

- Designing and developing interactive pension fund asset allocation tools for several public sector and Taft-Hartley pension funds.
- At the request of the World Bank, creating a simulation strategy tool for Poland when the country was saddled with the mounting financial burden of honoring its Social Security obligations. After analyzing the options Gene presented, Poland confidently dissolved its Social Security system and moved to a defined contribution system that, ten years later, contributed to the country's improved financial stability.

- Designing a real-time Internet-based application for senior officials of the U.S. Department of Defense which allowed government executives to make strategic decisions on the creation of a Social Security-based retiree health insurance fund for all military personnel.
- Designing and developing Web-based simulation tools for financial executives of large corporations including Northrop Grumman, Mutual of Omaha, Mutual of New York (MONY) and Ahold International, to analyze exposure to pension investment and liability risk.
- At the tenth annual *Business Week* CFO forum Gene spoke on dynamic interactive financial metrics systems to enable corporations to assess their overall financial status and risks on a daily basis (*Real Time Performance Metrics: In Search of the Holy Grail, the Virtual Close*).

Gene began his career spending four years as an actuary at the Pension Benefit Guaranty Corporation (PBGC), where he first gained a detailed understanding not only of the PBGC, but all federal entities whose regulatory authority impacts pension design and cost. Thanks to his extensive contacts within the federal government that began with his service to the PBGC, Gene is able to help his clients anticipate regulatory actions that will impact their funds.

After the PBGC, Gene served as a consultant with Towers, Perrin for two years. In 1981 Gene began a 21-year career at Milliman, where he established the firm's Washington, DC office, became the firm's youngest Equity Principal in 1984, and by 1990 was the youngest Equity Principal to serve on the firm's Board of Directors. Gene left Milliman in 2002 in response to his concerns over policies relating to liability limitations being set on client work. He and his colleagues formed Cheiron in November 2002.

**Richard Hudson**  
**FSA, FCA, EA, MAAA**

Richard Hudson, a Principal Consulting Actuary for Cheiron, has over 20 years of professional and managerial experience working on challenging retirement plan and employee benefit assignments.

Prior to his employment at Cheiron, Richard was Senior Vice President in the New York office of Aon Consulting, where he was the local retirement practice leader for the New York retirement practice and regional actuarial practice leader of the Northeast actuarial retirement team. His clients have included a wide variety of multiemployer and single employer pension plans.

Richard's area of expertise is pensions, where he has assisted clients in areas of plan design, mergers and acquisitions, due diligence, asset/liability modeling, union negotiations; compliance with ERISA requirements for funding, reporting, and disclosure; and the communication and administration of all types of pension plans.

Some of his recent assignments include:

- Reviewing risk strategy with clients (ALM studies and LDI strategies)
- Establishing and developing actuarial teams, as well as delivering training
- Leading presentations to Boards of Directors and Trustees

Richard holds a BS in Applied Mathematics and a BE in Computer Engineering from Stony Brook University. He is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, an Enrolled Actuary and a Member of the American Academy of Actuaries.

**Robert T. McCrory**  
**FSA, CERA, FCA, EA, MAAA**

Mr. McCrory is a Fellow of the Society of Actuaries, a Chartered Enterprise Risk Analyst, a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA. In addition, he is a Member of Institute for Management and Operations Research and a Member of the IEEE Computer Society. He joined Cheiron as a result of EFI Actuaries becoming an operating division of Cheiron.

Mr. McCrory is an experienced actuarial consultant, having served clients across the US for over 35 years. He currently serves as consulting actuary to a number of public retirement systems including the California Public Employees Retirement System (CalPERS), AC Transit, San Diego Transit, San Joaquin County, California, and Marin County, California.

Mr. McCrory is one of the nation's leading authorities on actuarial simulation and stochastic analysis. He and has been awarded three U.S. patents for his groundbreaking approach to asset/liability analysis. Mr. McCrory has performed asset/liability studies for the California Public Employees' Retirement System, the California State Teachers' Retirement System, the United Nations Joint Staff Pension Fund, the City of Cincinnati, the States of Hawaii and Kansas, the University of California Endowment, and the Washington State Investment Board, among others.

Among Mr. McCrory's recent presentations are the following:

- LAPERS (New Orleans, LA) – Actuarial aspects of pension plan design
- SACRS – STABLE Funding
- NASRA – Pension dynamics and risk

In addition, Mr. McCrory has authored papers on STABLE Funding and Communicating Risk, and two of his papers on Pension Dynamics and Pension Metrics have been published in the Proceedings of the 2012 Industrial and Systems Engineering Research Conference.

He has a B.S. in Applied Mathematics, Highest Honors, from Georgia Tech, an M.S. in Mathematics from Georgia Tech, and completed the University of Washington Software Development Certificate Program.

For the past 13 years, Mr. McCrory has been the lead consultant for the services provided by EFI Actuaries – now Cheiron – to the SDTC Pension Plan. The professional services provided to SDTC and MTS during that period have always been timely and of the highest standard.

With the acquisition of EFI Actuaries by Cheiron, we can offer an expanded professional staff and an office in San Diego. Initially, Mr. McCrory will provide 25% to 30% of the effort expended on behalf of SDTC by the Cheiron team. As the San Diego office becomes more familiar with the SDTC Plan, we expect Mr. McCrory's time to taper down somewhat as Mr. Holland and Ms. Harper become more involved.

**Stephen T. McElhaney**  
**FSA, FCA, MAAA, EA**

Stephen T. McElhaney is a nationally respected public sector retirement consultant with extensive experience as an actuary for various state and local governmental retirement plans. Steve's background has included presentations before public retirement boards and legislative bodies, as well as presentations before public sector conferences and actuarial meetings.

Steve is a member of the Public Plans Steering Committee of the Conference of Consulting Actuaries. The Committee has been very active in submitting comments to the Governmental Accounting Standards Board (GASB) as they propose changes in pension accounting standards. The Committee has also submitted comments to the Actuarial Standards Board on proposed changes to actuarial standards. Steve serves on the Board of Directors of the Conference and previously served on the Conference's Annual Meeting Committee, chairing that committee in 2007.

Steve also served on a task force established by GASB during the time that it was developing Statements No. 43 and 45 for other postemployment benefit plans (OPEB).

Prior to joining Cheiron, Steve was a Principal with a large national benefits consulting firm where he served as national leader for public sector retirement consulting in the US. This role included managing the activities of four public sector centers of excellence as well as being national coordinator for consulting related to GASB Statement No. 45. He also served on its national Professional Standards Leadership Team, which developed and monitored professional standards for all US employees.

Some of his more significant consulting assignments have included:

- Serving as lead actuary for numerous state and local governmental retirement plans.
- Performing actuarial audits for more than ten state retirement systems, including systems in Virginia, Illinois, Missouri, Ohio and Colorado.
- Serving as lead consultant on numerous pension plan design studies. Several of these studies included evaluation of hybrid arrangements as well as assessment of alternative defined contribution plans.
- Assisting clients in implementing retirement choice for employees. The most significant of these assignments was serving as the lead actuarial consultant to the State of Florida when full retirement choice was offered to all state employees.
- Serving as primary retirement actuary for over 20 GASB 45 valuations for various state and local governments.

**Fiona E. Liston**  
**FSA, EA, MAAA**

Fiona E. Liston is a fully credentialed consulting actuary with Cheiron. She specializes in public pension plans and Taft-Hartley multi-employer pension plans.

After graduating magna cum laude from the University of Washington, with a major in both mathematics and economics, Fiona worked her first ten years in the Seattle office of Milliman & Robertson. At that time she concentrated on passing the actuarial examinations, learning the trade and receiving her credentials. She developed a knowledge of ERISA funding rules as they applied to corporate pension plans. Working on all size plans, she received a thorough grounding in calculating minimum required and maximum deductible contributions along with federal restrictions on maximum benefit payments, required and permissible plan design features and the workings of various funding methods and techniques.

Fiona spent the next ten years of her career working in Milliman's Washington, DC office where her focus switched to public sector and multi-employer plans. Here she learned the special rules which apply to these types of plans and worked with a variety of Funds to develop and use funding techniques that met their specific goals. It was during this time that the Governmental Accounting Standards Board (GASB) came out with their landmark Statements Number 25 & 27 which unified the reporting of pension plan funding in this arena. Fiona assisted pension clients in conforming to this standard. She also worked on early retirement windows, Deferred Retirement Option (DROP) studies, provided assistance during union-management negotiations and made presentation to various groups about pension actuarial topics. These groups have included pension plans members, the International Foundation of Employee Benefits conference attendees and other actuaries.

Since becoming one of its founding partners in 2003, Fiona has worked for Cheiron in McLean, Virginia. Cheiron is a unique actuarial consulting firm whose primary business is to provide services to public sector and Taft-Hartley plans. In providing these services, the experienced consultants at Cheiron use interactive computer models which serve to educate their clients on how pension funding works and on how to identify and mitigate risks to the plan's funding over time. In this capacity, Fiona and her partners have assisted some of the largest Funds in the nation as they work their way through the aftermath of the "perfect storm" of 2000-2001 and the even bigger typhoon that occurred in 2008. Fiona has also been involved in the profession as an active member of the Actuarial Standard's Board's Pension Committee. This group is working to establish principles and practices that will carry the profession into the future and better serve both our client's and the public's interest. She has also worked with other Cheiron consultants on producing periodic alerts to our clients on issues pertinent to their fields of interest.